



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Percezione Visiva

1920-2-E3002Q040

Aims

The class aims to provide the basic psychological and psychophysiological knowledge necessary to understand the functioning of visual perception. It provides the tools for a fruitful interaction with other professional figures (psychologists, psychophysicists and neuropsychologists) for clinical and research purposes.

Contents

Psycho-physiological bases of visual perception:

- Anatomical-functional bases of sensation, perception and attention.
- Visual-spatial attention and eye movements.
- Neuropsychology of vision.

Psychological bases of visual perception:

- Research in psychology of visual perception.
- Theories and psychological models of visual perception.
- Rules of perceptual organization.
- The problem of perceptual constancy.

Detailed program

Psychophysiological bases of visual perception:

- Psychophysiological bases of visual perception: psychophysiological mechanisms underlying the perception of color, brightness, shape, depth, movement and recognition of objects.
- Neuropsychology of vision: disturbances of visual perception and visual attention due to brain injury; differential diagnosis between peripheral and central disorders of the dorsal visual route; evaluation and rehabilitation of the visual field defect; pseudo-hemianopsia; congenital and acquired reading disorders, .

Psychological bases of visual perception:

- Research in psychology of visual perception. What does research in visual perception mean: identification of problems; use of the experimental method; the main psychophysical methods applicable to the study of visual facts.
- Theories and psychological models of visual perception. The comparison of the three main approaches to the study of the perceptual facts: the psychology of gestalt, the cognitivist model and the Ecological theory of visual perception.
- Perceptual organization. Gestalt organizational principles; segmentation of figure and background; the amodal completion; the phenomenon of perceptual transparency.
- The problem of perceptive constancy. The perception of space and the relationship between size and perceived distance; the perception of color and brightness; visual illusions.
- *Perception and attention*. Mutual influences between bottom-up and top-down mechanisms.

Prerequisites

No prerequisites

Teaching form

Lectures with projections of powerpoint slides and videos.

Textbook and teaching resource

Courtesy of Pearson, a textbook has been assembled that contains chapters taken from other manuals on specific subjects of the Visual Perception class, entitled "Perception and Visual Attention".

Further material will be published on the e-learning pages associated with the class.

Semester

II year, I semester

Assessment method

The exam consists of:

- 1) Written assessment, including multiple choice-questions, and two open questions on the topics of the course. An example of the organization of the written assessment is the following:
 - a) 32 multiple choice 4-alternative questions, with 1 correct choice. One point is assigned for each correct answer, with no penalty. The minimum score for a successful assessment is 18 out of 32 correct answers. Final score is in 16ths (0.5 points for each correct answer).
 - b) Two open questions to which a complete and concise response is to be provided.
 - 2) Oral assessment (optional), including one or more open questions, to which concise and complete responses are to be provided. The evaluation of the oral assessment may result in a modification of the final score of the exam with a positive or negative sign, or in no change.
- The students' learning is may be also evaluated by a written (see above #1) in itinere assessments, at the end of the course.

Office hours

Prof. Roberta Daini: Wednesday 3 pm - 4 pm.
